Guest-editorial

This special issue of *Technology and Health Care* is devoted to selected papers derived from the 4th European Conference on Engineering and Medicine, promoted by European Society for Engineering and Medicine (ESEM).

The particular goal of the Conference was "bridging Engineering and Medicine" and "bridging East and West" that is to bring scientists and researches, engineers and clinicians from East and West of the Europe closer together and to establish new opportunities for scientific collaboration.

The Conference was co-organised by the Institute of Biocybernetics and Biomedical Engineering and International Centre for Biocybernetics of the Polish Academy of Sciences and co-sponsored by the Polish Academy of Sciences, State Committee for Scientific Research, Commission of the European Community and several Polish Scientific Societies.

Professor Jacques Melin was its President.

Nearly 350 participants from 25 countries attended the Conference. The Conference started with a full day tutorials "Pre-Conference Advanced Courses". The scientific program was relevant and stimulating, providing a balance between medical and engineering contributions. The main Conference was divided into 18 Parallel Sessions and several specific Symposia. Each day during morning plenary sessions high-level invited lectures were delivered. The link between ESEM and EC was clearly demonstrated by the integration of the Workshops on EC programmes and the BIOMED Project Leaders Meeting. The major achievement of the Conference was in the collaborative links which have been established between colleagues from Eastern and Western Europe.

In this special issue a selection of the most interesting lectures held at the Conference are presented. They include articles presenting recent achievements in the fastest developing areas of the biomedical engineering important for better understanding of chosen physiological processes as well as for the development of new "technologies" in health care.

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